

Application/Control Number: 09/072,784
Art Unit: 2624

Docket No.: 112884

AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 28. (Cancelled)

29. (currently amended) A video coding method, comprising:

identifying a video object from video data,

coding time instances of the video object as a plurality of coded video object planes (VOPs),

assigning each of the VOPs to one of a plurality of video object layers (VOLs) for the video object based on the information content thereof,

assigning a priority to each VOL using at least a two-bit value,

transmitting each VOL by:

transmitting an identifier of the VOL's priority, and

transmitting VOPs of the VOL.

30. (currently amended) The video coding method of claim 29, wherein the identifier comprises:

an is_video_object_layer_identifier flag, having a length of one bit that, when set to "1," indicates that priority is specified for the VOL; and

wherein the at least a two-bit value is a video_object_layer_priority field, having a length of three bits, taking values between 1 and 7, where 1 represents a highest priority and 7 represents a lowest priority.

31. (Previously presented) The video coding method of claim 29, wherein causal VOPs are assigned to a first VOL and non-causal VOPs are assigned to a second VOL.

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32. (Previously presented) The video coding method of claim 29, wherein intra-coded VOPs and predictive-coded VOPs are assigned to a first VOL and bidirectionally predictive-coded VOPs are assigned to a second VOL.

33. (Previously presented) The video coding method of claim 29, wherein the data of a single VOL is transmitted as a continuous burst of data.

34. (currently amended) A video coding method, comprising:

identifying a video object from video data,

coding time instances of the video object as a plurality of coded video object planes (VOPs),

assigning each of the VOPs to one of a plurality of video object layers (VOLs) based on information content thereof,

assigning a priority to each VOL using at least a two-bit value,

determining whether transmission conditions permit transmission of all VOLs of the video object,

if not, discarding a lowest priority VOL, and

transmitting remaining VOLs by:

transmitting data representing the VOL's priority, and

transmitting VOPs of the VOL.

35. (currently amended) The video coding method of claim 34, wherein the identifier comprises:

an is_video_object_layer_identifier flag, having a length of one bit that, when set to "1," indicates that priority is specified for the VOL; and

wherein the at least two-bit value relates to a video_object_layer_priority field, having a length of three bits, taking values between 1 and 7, where 1 represents a highest priority and 7 represents a lowest priority.

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36. (Previously presented) The video coding method of claim 34, wherein causal VOPs are assigned to a first VOL and non-causal VOPs are assigned to a second VOL.

37. (Previously presented) The video coding method of claim 35, wherein intra-coded VOPs and predictive-coded VOPs are assigned to a first VOL and bidirectionally predictive-coded VOPs are assigned to a second VOL.

38. (Previously presented) The video coding method of claim 35, wherein the data of a single VOL is transmitted as a continuous burst of data.

39. (currently amended) A method of prioritizing encoded video data streams, the method comprising:

assigning priorities using at least a two-bit value to video object layers associated with the video data streams;

adding priority data for each video object layer to the video data streams; and

transmitting the video object layers and priority data to a decoder according to the assigned priority of each video object layer.

40. (Previously presented) The method of prioritizing an encoded video data stream of claim 39, wherein the priority data identifies which video object layer may be discarded in the event of limited memory or processor resources.

41. (Previously presented) The method prioritizing encoded video data streams of claim 39, wherein the priority data identifies which video object layer may be discarded in the event of channel errors.

42. (Previously presented) The method prioritizing encoded video data streams of claim 39, wherein the indication of the priority of the video object layer is optional.

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43. (Previously presented) The method of prioritizing encoded video data streams of claim 39, wherein information related to video object layers having a high priority is transmitted before information related to video object layers having a low priority.

44. (Previously presented) A method of decoding encoded bitstreams of claim 39, wherein the priority data identifies which video object layer to discard in the event of limited memory or processor resources.